

COVID-19

Health Evidence Summary No.75

Kerry Millington & Samantha Reddin

Liverpool School of Tropical Medicine (LSTM) & Institute of Development Studies

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This daily COVID-19 Health Evidence Summary is to signpost DFID and other UK government departments to the latest relevant evidence and discourse on COVID-19 to inform and support their response. It is a result of 3 hours of work and is not intended to be a comprehensive summary of available evidence on COVID-19 but aims to make original documents easily accessible to decision makers which, if relevant to them, they should go to before making decisions.

Clinical characteristics and management

Publication date	Title/URL	Journal/Article type	Summary	Keywords
28.06.2020	Predicting the disease outcome in COVID-19 positive patients through Machine Learning: a retrospective cohort study with Brazilian data	medRxiv (not peer reviewed) pre-print	<ul style="list-style-type: none"> • Accurate diagnosis of patients with C19 is important to offer adequate treatment and prevent health system overload • This preliminary retrospective study explores predicting a poor prognosis in positive C19 patients and possible outcomes using machine learning • Machine learning techniques fed with demographic and clinical data including comorbidities can assist in the prognostic prediction and physician decision-making allowing a faster response and contributing to non-overload of healthcare systems 	Machine learning

26.06.2020	Incidence and severity of COVID-19 in HIV-positive persons receiving antiretroviral therapy	Annals of Internal Medicine	<ul style="list-style-type: none"> • A cohort study in HIV clinics in 60 Spanish hospitals between 1 Feb and 15 April 2020 to describe the incidence and severity of C19 among 77 590 HIV-positive persons receiving ART • 236 were diagnosed with C19, 151 were hospitalised, 15 admitted to ICU and 20 died • HIV-positive patients receiving TDF/FTC have a lower risk for C19 and related hospitalisation than those receiving other therapies 	HIV-positive, ART
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Epidemiology and modelling

Publication date	Title/URL	Journal/Article type	Summary	Keywords
29.06.2020	Epidemiological characteristics of COVID-19: a systematic review and meta-analysis	Epidemiology & Infection Article	<ul style="list-style-type: none"> • The incubation period and lag between the onset of symptoms and first clinical visit for C19 are longer than other respiratory viral infections including MERS and SARS • Quarantine periods longer than the mandatory 14 days may be more justified for extreme cases 	Incubation period, symptom onset
28.06.2020	Assessing the nationwide impact of COVID-19 mitigation policies on the transmission rate of SARS-CoV-2 in Brazil	medRxiv (not peer reviewed) pre-print	<ul style="list-style-type: none"> • Analysis of the effects of 547 published governmental interventions, and population adherence, on the dynamics of C19 cases across all 27 Brazilian states • Results show that population adherence to social distance recommendations plays an important role in the effectiveness of interventions 	Mitigation, NPI

			<ul style="list-style-type: none"> This is a major challenge to the control of C19 in LMICs 	
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Testing

Publication date	Title/URL	Journal/Article type	Summary	Keywords
28.06.2020	Prevalence of SARS-CoV-2 among workers returning to Bihar gives a snapshot of COVID across India	medRxiv (not peer reviewed) pre-print	<ul style="list-style-type: none"> India has reported the fourth highest number of confirmed SARS-CoV-2 cases globally, although this is likely an underestimate due to little community testing Millions of daily laborers left cities for their rural family homes when India partially exited from lockdown on 4 May 2020 This study tested a near-random sample of laborers returning to the state of Bihar to estimate positive testing rate for COVID across India for a 6-week period immediately following the initial lifting of the India's lockdown Positive testing rates are only moderately correlated with, and 21% higher than, Indian states' official reports, which are not based on random sampling Higher prevalence among returning laborers may also reflect great C19 spread in crowded poor communities such as slums 	Prevalence, migration
29.06.2020	Assessment of the use and quick preparation of saliva for rapid microbiological	bioRxiv (not peer reviewed) pre-print	<ul style="list-style-type: none"> Shortage in swabs for collecting nasopharyngeal and oropharyngeal samples and a shortage in RNA extraction kits can lead to a backlog in sample collection and testing This study aimed to assess the diagnostic 	Saliva, heat

	diagnosis of COVID-19		<p>performance of direct real time RT-PCR detection of SARS-CoV-2 in heated saliva samples, avoiding the RNA isolation step, as an alternative and easier-to-collect clinical sample to detect SARS-CoV-2 compared to the diagnostic performance of nasopharyngeal and oropharyngeal swabs</p> <ul style="list-style-type: none"> • RT-PCR can be performed using saliva in an RNA extraction free protocol with good sensitivity and specificity 	
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Leadership and governance

Publication date	Title/URL	Journal/Article type	Summary	Keywords
26.06.2020	Framework for managing the COVID-19 infodemic: methods and results of an online, crowdsourced WHO technical consultation	Journal of Medical Internet Research Article	<ul style="list-style-type: none"> • WHO technical online consultation on responding to the C19 infodemic • 594 ideas were distilled into a set of 50 proposed actions in 5 action areas in a framework for managing infodemics in health emergencies • 6 policy implications to consider 	Infodemic, framework

Comments, Editorials, Opinions, Blogs, News

Publication date	Title/URL	Journal Article type	Author(s)
29.06.2020	Including Immigrants is good policy not just during the pandemic, but afterwards too	CDG Blog	Thomas Ginn Janeen Madan Keller
29.06.2020	Worst virus fears are realized in poor or war-torn countries	AP News	Gerald Imray Joseph Krauss
29.06.2020	Trial of Oxford COVID-19 vaccine starts in Brazil	University of Oxford Medical Sciences Division News	

Dashboards & Trackers

Cases & deaths: Global	Cases & deaths: Regional	Cases & deaths: Country	Living evidence & policy maps	Current research including trials	Diagnostics	Treatments	Vaccines
WHO sitreps	WHO Africa	Ghana	COVID-NMA	WHO	FIND SARS-CoV-2 Test Tracker	Global COVID-19 Clinical Trial Tracker	CEPI
WHO dashboard	African Arguments	Indonesia	EPPI Centre	WHO International Clinical Trials Registry Platform (ICTRP)	FIND SARS-CoV-2 Diagnostics: performance data	US NIH registered clinical trials	Vaccine Centre LSHTM
Johns Hopkins University	European CDC	Nigeria CDC	Norwegian Institute of Public Health	Cytel	Serology-based tests for COVID-19	Solidarity trial	COVID-19 Oxford Vaccine Trial

WEF		Sierra Leone	Oxford C19 Government Response Tracker (OxCGRT)	US NIH	Our World in Data: C19 Testing	COVID-19 Therapeutics Accelerator	
Our World in Data		Singapore	Our World in Data: C19 Policy responses	COVID-evidence			
Global 5050		UK	IFPRI COVID-19 Policy Response Portal	Cochrane			
CEBM, University of Oxford		US	COVID-19 Primer	Clinicaltrials.gov			
Humanitarian Data Exchange			NIH LitCovid	UKCDR			
Information is Beautiful			WHO COVID-19 Database				
LSHTM							
HealthMap (cases)							
The Commons Project							

C19 Resource Hubs

Global	Regional & Country	Academic journals & Publishers	Institutes/Centres /Funders/Other	Health Topics	Social Sciences
WHO COVID-19 pandemic	Africa CDC	Annals of Internal Medicine	LSTM	Stop TB Partnership	SSHAP
WHO risk communication	African Union	BMJ	LSHTM		IDA
WHO Q&A	Nigeria CDC	Bulletin of the WHO	ICL MRC Centre for Global Infectious Disease Analysis	Global Menstrual Collective	Disability and inclusion
WHO Global research	GeoPoll: SSA	Cambridge University Press	ODI	SLH: Handwashing in low resource settings	Coregroup IDDC
COVID-19 Solidarity Response Fund	Global Health Network Africa	Cell Press	Johns Hopkins University	RBM Partnership	Ethics, health systems & COVID-19
UN	African Academy of Sciences	Cochrane	Center for Global Development		Social Development Direct C19 blog series
UN Women	Africa Evidence Network	Elsevier	CMMID Repository		
UNOCHA	OCHA Southern and Eastern Africa	JAMA Network	Norwegian Institute of Public Health		

	COVID-19 Digest				
UNHCR	South African Government	The Lancet	Oxford Centre for Evidence-based Medicine		
UNICEF		medRxiv and bioRxiv (Preprints)	HEART		
UNESCO		NEJM	UKRI		
UN WFP		Oxford University Press	Evidence Aid		
GOARN		PLoS	NIH		
EPI-WIN		SAGE journals	IFPRI Resources and Analyses of C19 Impact		
World Bank		Science	Prevent Epidemics		
Our World in Data		Springer Nature			
COVID-19 Narratives by David Nabarro		SSRN (Preprints)			
Reliefweb		Wiley			
Humanitarian OpenStreetMap Team					
Global Partnership for					

Sustainable Development Data					
WorldPop					
Flowminder					
COVID-END					
Premise COVID-19 Global Impact Study					
GISAID					

Online learning & events

Date	Title/URL	Online learning/event	Duration	Lead
30.06.2020 1000 BST	Clinical update: dexamethasone and hydroxychloroquine for treatment of severe COVID-19	Webinar		African Academy of Sciences
26.06.2020 0900 to 1030 EDT	Monitoring and mitigating the collateral effects of COVID-19	Online event	1h 30	CGD
13 July 3:00 PM – 6:00 PM BST	2020 UCL-Lancet Lecture: Global Health Preparedness by Dr Muhammad Pate, Global Director for Health, Nutrition and Population at the World Bank Group	Online Lecture	2 hour lecture, 1 hour panel discussion	UCL, The Lancet

June 2020	OpenWHO, the free, open-access learning platform for health emergencies, now offers 10 online courses related to COVID19.	Online courses	Varies	WHO
24-25.06.2020	Africa's leadership role in COVID-19 vaccine development and access	Zoom webinar		African Union & Africa CDC
Available now	Standard precautions: Environmental cleaning and disinfection	Online course	1 hour	WHO
Available now	COVID-19: Effective Nursing in Times of Crisis	Online course	2 weeks – 2 hours per week	Johns Hopkins School of Nursing
Available now	WHO Academy and WHO Info mobile applications	Mobile app		WHO
Available now	COVID-19: Pandemics, Modelling and Policy	Online learning	2 weeks 2 hours weekly study	FutureLearn UNESCO UNITWIN Complex Systems Digital Campus/Open University
12.05.2020	COVID-19 and maintaining quality essential health services	Webinar	1 hour	WHO & ISQua – Dr Shams Syed, Dr Peter Lachman, Dr Teri Rynolds & Dr Ed Kelley
11.5.2020	COVID-19 Contact Tracing course	Online learning	5 hours	Johns Hopkins Bloomberg School of Health

7-28 May 2020	Virtual Evidence Weeks	5 sessions	1h 30	International Initiative for Impact Evaluation (3ie)
Tuesdays at 1700 CEST (Geneva time) & Thursdays 0830 CEST (Geneva time)	COVID-19 Open online brief with Dr David Nabarro	Event	1h	4SD
30.04.2020	Professor Chris Whitty's Gresham lecture on COVID-19	Event	1h 20	Gresham College
Available now	Emerging respiratory viruses, including COVID-19: methods for detection, prevention, response and control	Online learning	3 hours	WHO
Available now	Responding to COVID-19: Real-time training for the coronavirus disease outbreak	Online learning	Multiple self-paced course	WHO
25 May 2020	COVID-19: Tackling the Novel Coronavirus	Online learning	3 weeks 4 hours weekly study	FutureLearn LSHTM/UK PHRST
Available online now without mentors. Updated version will commence early June 2020	COVID-19 Diagnostics and Testing	Online learning	3 weeks 3 hours weekly study	FutureLearn FIND/LSHTM/ASLM

6 April 2020	COVID-19 Critical Care: Understanding and Application	Online learning	5 weeks 1 hour weekly study	FutureLearn University of Edinburgh & Royal College of Physicians of Edinburgh
Available now	COVID-19 supporting online courses	Online learning	Multiple self-paced course	BMJ Learning

Suggested citation

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Rapid review methodology

The rapid daily search for peer-reviewed literature is carried out through a PubMed search with the following keywords (“COVID-19” OR “severe acute respiratory syndrome coronavirus 2” OR “2019-nCoV” OR “SARS-CoV-2” OR “2019nCoV” OR “coronavirus”) AND (“Africa”) OR (“equity” OR “equities”) OR (“poverty”), restricted to articles published in the previous 2 to 3 days, in English. This is complemented by a search of the homepage of the following high-impact global health journals: The Lancet journals, New England Journal of Medicine, Nature, JAMA, Annals of Internal Medicine, Cochrane Reviews, BMJ Global Health, the PLoS journals and a Twitter search of their Twitter pages. A search also of preprints from bioRxiv and medRxiv. Please note that papers that have not been peer-reviewed are highlighted in red. All primary research papers that relate to the primary and secondary impacts of the COVID-19 response in LMICs, and disease control and health system responses are included. Articles related to tackling the secondary impacts on other sectors are not included. Additional commentaries, opinions, and commissioned pieces are selected based on relevance.

The search for dashboards, guidelines, tools, editorials, comments, blogs, opinions and news is through the academic journals listed above, C19 resource hubs and following lead academics and professionals on Twitter.

About this report

This daily COVID-19 health evidence summary (HES) is based on 3 hours of desk-based research. The summary is not intended to be a comprehensive summary of available evidence on COVID-19 but aims to make original documents easily accessible to decision makers which, if relevant to them, they should go to before making decisions. The HES are not intended to replace medical or professional advice and the researcher or the K4D consortium cannot be held responsible for any decisions made about COVID-19 on the basis of the HES alone. K4D services are provided by a consortium of leading organisations working in international development, led by the Institute of Development Studies (IDS), with Education Development Trust, Itad, University of Leeds Nuffield Centre for International Health and Development, Liverpool School of Tropical Medicine (LSTM), University of Birmingham International Development Department (IDD) and the University of Manchester Humanitarian and Conflict Response Institute (HCRI).

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